

Shipping U.S. Agricultural Products to Vietnam

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From the perspective of the Vietnamese importer and the U.S. agricultural exporter, the ocean liner industry, composed of shipping lines like Mitsui, Maersk, and American President Lines, are a vital link between U.S. farms and the Vietnamese consumer. Understanding which firms are doing the majority of the business, how products move through Asia to Vietnam, how shipping firms price their services, and what can be done to lower shipping costs, is essential to establishing long-term, profitable marketing operations.

Major Agricultural Commodities in U.S.-to-Vietnam Liner Trades: Table 1 lists the top 10 agricultural commodities shipped in containers from the United States to Vietnam for calendar years 1997 and 1998. Total shipments of containerized agricultural commodities for 1997 were 2,238 20-foot equivalent units (TEU), a standard measure used in ocean shipping. In 1998, a total of 1,279 TEU's of agricultural goods reached Vietnam, a 43-percent decrease from the previous year but about the 1996 level of trade. Although Vietnam was only marginally affected by the Asian economic downturn, many of Vietnam's trading partners faced substantial financial difficulties, and the result was less Vietnamese overseas income and investment. U.S. cotton imports showed the most significant decline (69 percent), but almost all commodities experienced some decline in numbers of containers exported. U.S. cotton exports were down because U.S. production fell from 18.0 million bales to 13.5 million bales. U.S. exporters rationed sales, and Vietnam was offered a much smaller share of the crop.

Table 1: Top 10 Agricultural Commodities, 1997 and 1998

Rank	Commodity (12 mo.) (Jan –Dec 1997)	TEU*	% of total	Commodity (12 mo.) (Jan -Dec 1998)	TEU*	% of total
1	Cotton, fabric	913	41%	Cotton, fabric	283	22%
2	Dairy products (+eggs)	333	15%	Wheat, cereal	273	21%
3	Fruit (apples, grapes)	254	11%	Dairy products (+eggs)	208	16%
4	Wheat, cereal	188	8%	Fruit (apples, grapes)	181	14%
5	Fish meal	156	7%	Animal feed	115	9%
6	Pastes, sauces, soups	94	4%	Pastes, sauces, soups	39	3%
7	Animal feed	44	2%	Oranges, pulp	26	2%
8	Oranges, pulp	38	2%	Vegetables (frozen potatoes)	26	2%
9	Bulk corn, wheat	35	2%	Nonalcoholic Beverages	21	2%
10	Hides, skins, furs	29	1%	Hides, skins, furs	18	1%
	Other ag commodities	152	7%	Other ag commodities	89	7%
	Total	2,238	100%	Total	1,279	100%

*TEU is 2--foot equivalent container units. Both 20-foot and 40-foot containers are regularly used in the U.S.-Vietnam trades. A 20-foot container generally weighs between 9 and 15 tons depending on the commodity. (Source: PIERs, Journal of Commerce, New York)

Cotton is still the major commodity imported into Vietnam, comprising 22 percent of containerized agricultural shipments in 1998, or 283 TEU's. Imports of wheat and cereal products rose by 45 percent over the previous year. Fresh fruits, mainly apples but also including grapes, pears, and other fruits, ranked only fourth among commodities arriving by ocean container. They comprised 14 percent of shipments, or 181 TEU's, in 1998. Other products which rank in the top 10 for both years include: dairy products, food stuffs (canned goods, pastes, sauces), containerized animal feed and bulk grain, oranges, vegetables, hides and skins, and nonalcoholic beverages.

Future Market Prospects: Vietnam is a small (\$26 million in fiscal year 1998) market with enormous potential. Currently U.S. direct exports are focused on consumer products (powered milk, frozen meat, fresh fruit, tree nuts, grocery items), intermediate goods, and commodities (cotton, corn, soybeans, soybean meal, wheat, and beverage syrups). Paradoxically, consumer-oriented products are an expanding segment of trade. If parallel, indirect, or re-exported trade values are considered, the total market is perhaps another \$30 million. The Asian financial crisis hit Vietnam in 1998, and foreign exchange to support imports has become scarce. Government of Vietnam (GVN) policy of higher duties has been effective in curbing imports of consumer goods. Generally, the import value of U.S. agricultural goods is down about 27 percent from last year, in part due to lower commodity prices and lower consumer demand. The other side of trade ledger is different. U.S. imports of \$256 million worth of Vietnam's agricultural commodities in FY1998 dwarfed the \$26 million worth of agricultural commodities U.S. shippers sent to Vietnam. The United States is one of Vietnam's largest markets for green coffee (68,000 tons or \$120 million). The United States also brought \$65 million worth of shrimp, about \$24 million worth of cashews, and \$6 million worth of rice. For FY1999, the pace of U.S. imports from Vietnam (Oct/Feb) is about 28 percent above the same period last year.

In the near term, our export opportunities lie in feed components and genetics for new commercial feed mills and the livestock industry. Corn, soybeans, and feed additives are key to revitalizing Vietnam's livestock industry. The logistical problems noted above are constraints, which provide an advantage for our competitors, especially for the Australians and, to lesser extent, the Canadians. Both benefit unfairly from price-setting wheat boards.

We expect sales of U.S. wheat to increase. Booming expansion in milling capacity, along with prospects of better grain discharge facilities at larger ports, greatly improves prospects for U.S. wheat. A nearly completed Section 416 (b) monetization program will introduce U.S. wheat, particularly the classes of Hard Red Spring (HRS), Soft White Winter (SWW), and Hard Red Winter (HRW), to Vinaflour in northern Vietnam. Binh Dong Flour Mill in downtown HCMC recently received a small lot (10,000 tons) of our wheat and would buy more if larger ports were developed along the Thi Vai River year.

Our position could possibly improve if the GSM-102 Export Credit Guarantee Program were activated; currently only off-shore banks may open Letters of Credit (LC), a feature that Vietnam's state-owned companies do not find attractive. FAS-Hanoi is pressing the GVN to provide a sovereign guarantee that would enable USDA to authorize specific Vietnam commercial banks to open LC's under the program. Progress is being made toward a bilateral trade agreement that will provide further access for wheat and other agricultural commodities.

Major Shipping Lines in the U.S.-to-Vietnam Trades: A major advantage of the ocean container shipping market is the degree of competition which exists. Competition among shipping lines tends to drive down shipping rates and increase services. Policies of the Governments of Vietnam and the United States encourage the services of worldwide shipping lines to call at each nation's ports, allowing shippers a wide range of shipping services and more frequent service. Table 2 lists the top 10 shipping lines serving the U.S.-Vietnam trades in 1997 and 1998.

Table 2: Top 10 Shipping Lines for Agricultural Commodities, Calendar Years 1997 and 1998.

Rank	Shipping Line (12 mo.) (Jan -Dec 1997)	TEU*	% mkt share	Shipping Line (12 mo.) (Jan -Dec 1998)	TEU*	% mkt share
1	Hanjin	457	20%	Hanjin	375	29%
2	Evergreen	291	13%	Mitsui OSK	132	10%
3	Mitsui OSK	249	11%	P&O Nedlloyd	106	8%
4	Maersk	209	9%	Sea-Land	98	8%
5	COSCO	177	8%	Evergreen	95	7%
6	Sea-Land	126	6%	Maersk	90	7%
7	Zim Line	125	6%	Hyundai	86	7%
8	Hyundai	113	5%	K Line	44	3%
9	APL	108	5%	OOCL	44	3%
10	Yang Ming	97	4%	Italian	44	3%
	Other	287	13%	Other	166	13%
	Total	2,238	100%	Total	1,279	100%

* TEU is 20-foot equivalent container units.

Because carriers sometimes specialize in services (refrigerated containers versus nonrefrigerated or dry containers) or commodities (some carriers have contracts with major shippers of cotton or other products) the ranking of top shipping lines is likely to change from year to year.

On May 1, 1999, new U.S. regulations concerning all ocean shipping companies which call on U.S. ports took effect. Probably the most dramatic event has been the demise of ocean shipping cartels, notably the Transpacific Westbound Rate Agreement, which dominated pricing in the U.S.-to Asia trades. Ocean carriers are still allowed to meet and discuss rate levels and capacity in the trades, but the cartels are much less disciplined, and carriers do not necessarily have to maintain standard rate levels. These changes have largely been brought about by newer, more liberal confidential contracting arrangements, which are now possible between shippers and ocean carriers. Industry officials believe that 80 to 90 percent of all container movements will eventually move under

contract. U.S. exporters and Vietnamese importers should explore establishing contractual shipping services with one or more carriers as a way of reducing rates or setting service standards. Shippers associations, whether for import or export, are being formed to pool container volumes and enhance shipper bargaining power when negotiating with carriers.

Major U.S. to Vietnam Shipping Routes With few exceptions, containers shipped primarily from U.S. West Coast ports must be transshipped through other Asian ports before arrival. Shallow port depth, inadequate container handling equipment, and the lack of sufficient Vietnamese-bound cargos per ship are the primary reasons ocean liner companies prefer to transfer containers onto smaller vessels from the larger (4,000 to 6,000 TEU) vessels which regularly leave the United States. Table 3 lists the major transshipment points from 1996 to 1998. Hong Kong has remained the major transshipment point over the last 3 years and recently has increased its market share. Over the last 2 years, Kaohsiung, Taiwan, and Singapore have maintained their positions as secondary transshipment points for containers going to Vietnamese ports. Transshipment is also performed at Korean and Japanese ports but on a very limited basis.

Table 3: Major Transshipment Ports: U.S.-Vietnam Agricultural Trade

Rank	1996	1997	1998
1	Hong Kong (42%)	Hong Kong (40%)	Hong Kong (48%)
2	Singapore (38%)	Singapore (36%)	Singapore (25%)
3	Kaohsiung (12%)	Kaohsiung (21%)	Kaohsiung (18%)
	Other (8%)	Other (3%)	Other (8%)

* 1997 is for 6 months only, January to June. (Source: PIERS, *Journal of Commerce*, New York)

Since 1996, the majority (over 70 percent) of cargoes arrived in Ho Chi Minh City, with the remainder being shipped to Hai Phong, destined mainly for Ha Noi (table 4). Hai Phong's share has remained relatively constant, while Da Nang is reported to receive more and more containers each year. By 1998, the port, located in the center of the country, received 4 percent of the cargoes from the United States to Vietnam.

Table 4: Major Vietnamese Receiving Ports: U.S. -Vietnam Agricultural Trade

Rank	1996	1997	1998
1	Ho Chi Minh City (74%)	Ho Chi Minh City (70%)	Ho Chi Minh City (75%)
2	Hai Phong (25%)	Hai Phong (27%)	Hai Phong (21%)
3	Other (1%)	Da Nang (3%)	Da Nang (4%)

(Source: PIERS, *Journal of Commerce*, New York)

The Cost of Importing Into Vietnam: As mentioned previously, Vietnam's dependence on transshipment from other countries can add extra costs and increase transit times relative to other Asian ports. In tables 5 and 6, the rates charged by ocean carriers serving selected Asian ports are compared for both apples and cotton. In the case of apple shipments from Seattle, WA, costs are from 2 percent (Singapore) to 42 percent (Taiwan) cheaper into other Asian ports than into Vietnamese ports (table 5). Although rates are still lower to other regional ports, the difference is

much less than in the past. Over the past 2 years, rates have dropped from \$6,421 in September 1997 to \$3,694 today, a decrease of 42 percent.

Table 5: Comparison of Refrigerated Ocean Container Rates for Apples from Seattle to Select Asian Ports*

Country	Apple Rate May 1999*	\$ less than Vietnam rate	Pcnt. below Vietnam rate	Distance (st. miles)	Cost per mile
Taiwan	\$2,146	\$1,548	42%	5,261	\$0.41
Hong Kong	\$2,353	\$1,341	36%	5,635	\$0.42
Vietnam	\$3,694	-----	----	6,153	\$0.60
Singapore	\$3,604	\$90	2%	7,014	\$0.51
Thailand	\$3,347	\$347	9%	6,472	\$0.52

* Weighted average for one 40-foot container by market share of all carriers serving trade lane for this commodity based on tariffs filed at the U.S. Federal Maritime Commission, May 15, 1999.

Because some of the ports differ considerably in distance from the United States, the rates to destinations selected were divided by the statute miles to compute a “cost per mile” figure for a representative container of apples. Discounting distance in this way, costs to Vietnam were still \$0.60 cents or 15 percent higher than the next most costly port, Singapore.

Cotton rates into Vietnam were also high in comparison to the costs of shipping into other Asian ports. Cotton rates generally are about half of the cost of shipping apples to any of the selected destinations. Cotton shipments do not require the special services required by apple shipments, that is, refrigerated containers, special slots for electrical power connections, and temperature maintenance checks during transit. Also, more carriers are able to compete for cotton shipments which increases the likelihood of lower rates. Table 6 below again compares the rates for cotton shipments to Vietnam versus other Asian destinations. And again, rates to other destinations were from 34 percent (Thailand) to 50 percent (Taiwan) lower than shipping the same commodity to Vietnam. On a cost-per-mile basis to discount the distance factor, the cost was \$0.15 (or 60 percent) higher than to the next most costly port destination, Thailand.

Table 6: Comparison of Container Rates for Cotton from Oakland/LA/LB to Select Asian Ports*

Country	Cotton Rate Sept 1997*	\$ less than Vietnam rate	Pcnt. below Vietnam rate	Distance (st. Miles)	Cost per mile
Taiwan	\$1,229	\$1,213	50%	5,261	\$0.23
Hong Kong	\$1,259	\$1,183	48%	5,635	\$0.22
Vietnam	\$2,442	-----	----	6,153	\$0.40
Singapore	\$1,381	\$1,061	42%	7,014	\$0.20
Thailand	\$1,610	\$832	34%	6,472	\$0.25

* Weighted average for one 40-foot container by market share of all carriers serving trade lane for this commodity based on tariffs filed at the U.S. Federal Maritime Commission, December 30, 1998.

It should be emphasized that using a cost-per-mile figure has its limitations because a vessel may stop at one or more ports before it arrives at a particular port. Increased volumes of Vietnamese-bound cargoes on a particular vessel will increase the chances of a direct service from the United States and even the likelihood that Vietnamese ports will one day be the first ports of call. Further development of container facilities near the cities of Hai Phong, Ho Chi Minh City, and Da Nang are contingent on increased volumes.

Development of Vietnamese Container Ports: Industry sources [*Lloyd's List*, *Maritime Asia*, *Maritime Digest*] report plans are moving forward for a new container terminal just south of Ho Chi Minh City at Tan Thuan along the Saigon River. Developed and operated by foreign and Vietnamese transportation companies, the new Vietnam International Container Terminal is designed to accommodate up to two containerships of 1,000 TEU's, or 20,000 deadweight tons (dwt). Most of the container traffic arriving in Ho Chi Minh City is currently handled at the existing facilities at Saigon Port, NewPort, and Ben Nghe. Vung Tau, Thi Vai River Terminals, and Chan May, near Hue, are also seen as having potential as major container facility, possibly as a transshipment center for Vietnam and Asian countries. Also being discussed is the construction of new bulk wheat unloading and milling facilities south of Ho Chi Minh City on the Thi Vai river.

In Hai Phong, most of the container traffic is handled at two terminals, Berths One, Two, and Three, and at another called Chua Ve terminal. Chua Ve currently has two older berths (300 meters in length) and a new berth with two gantry cranes installed in 1998. Plans for a new terminal closer to the ocean to handle dry and liquid bulk cargoes and general cargoes would allow the existing facilities at Hai Phong to be dedicated solely to container traffic. With regular dredging, the port expects it can maintain the capacity to accept 10,000 dwt vessels.

The government of Vietnam's primary focus will be to upgrade existing container facilities before tackling new, large projects. Foreign investment, especially from ocean shipping companies who expect to benefit from port expansion, is being encouraged. Shippers can ultimately expect to benefit from direct calls by carriers.

Selecting an Ocean Carrier: Although international traders are optimistic that the economic and political climate is right for Vietnamese port investment, importers and exporters must continue to deal with high ocean freight rates relative to other Asian countries in the region. Selecting an ocean carrier with the lowest cost, which delivers superior services, is no easy task. Carriers are continuously changing the rates they charge and their shipping schedules to take advantage of shifting trade volumes and opportunities for increased profits. U.S. exporters who have sold the product at a delivered price are faced with which shipping line to select. Many times however, Asian importers are quoted agricultural commodity prices based on which carrier they select, so it is important for the importer to have knowledge of carrier performance and cost. Table 7 is representative of monthly reports, called the OCEAN Rate Bulletin, published by the U.S. Department of Agriculture to better inform importers and exporters about ocean services and rates for specific commodities between specific destinations.

Each Bulletin lists all ocean carriers (e.g., Hanjin, Mitsui OSK) participating in a particular trade (West Coast ports to Ho Chi Minh City) for a particular commodity. Each subsequent month lists

the number of 40-foot containers shipped along with the total shipped for the year to date. Transit times between the U.S. and the destination port are also listed for each carrier. The ocean rate is then calculated on a per-ton basis along with ancillary charges like Bunker (fuel) Adjustment Factors, Container Yard Receiving charges, Currency Adjustment Factors, and any other charges which apply.

Table 7: Raw Cotton: L.A./L.B./Oakland Ports to Ho chi Minh, Vietnam (December 1998)

Total 1998: 283 TEU	Hanjin	Mitsui OSK	NYK Line	Evergreen	Yang Ming
Market share – CY 1998	32%	28%	23%	10%	7%
Transit time	22 Days	22 Days	23 Days	26 Days	23 Days
Ocean rate (per ton)	\$2,330	\$2,125	\$2,125	\$2,000	\$2,350
Surcharges				\$399	
BAF (per ton)	\$4	AI	AI		\$2
CY rec (per ton)	\$22	AI	AI		\$26
Container Rate (Based on 19.5 tons/40 ft)	\$2,850	\$2,125	\$2,125	\$2,399	\$2,910

Notes: FEU=40-foot equivalent units for month/year; BAF= Bunker (fuel) Adjustment Factor; CY Rec= Container Yard Receiving Charge AI: All Inclusive

With this information, a shipper can see which carriers are in a particular market, how much of the market they command, approximately how long their product will be in transit, and what prices ocean carriers charge. Ocean Rate Bulletins are currently produced for apples, almonds, beef, cherries, cotton, frozen potatoes, grapes, grapefruit, lemons, lettuce, oranges, pears, pistachios, poultry, and raisins. Bulletins are only produced during major shipping periods as fresh fruits and other products may only be shipped during certain months. Also, there must be sufficient activity in a particular trade to warrant the production of a Bulletin.

Bulletins are available by mail from USDA or on the Internet at:

<http://www.ams.usda.gov/tmd/Ocean/Index.htm>. Another useful publication listed in the appendix is the *“Directory of Freight Forwarders Serving Agricultural Shippers (1999)”*. The directory lists freight forwarders who handle agricultural products by the commodity they generally handle and region of the world they generally serve. The vast majority of U.S. exporters use freight forwarders as do many importers. This publication and many others which may prove useful to Vietnamese importers may be found at: <http://www.ams.usda.gov/tmd/tmdsea.htm>

Summary: Second only to finding and establishing a close relationship with a reliable supplier of the commodity to be imported is the selection of transportation service providers you expect to deliver your product. This analysis dealt mainly with the ocean carrier industry, which serves the U.S.-Vietnam trades, prospects for improved services, and the selection of the most appropriate carrier.

(Questions or comments regarding this analysis should be directed to Jim Caron, Transportation and Marketing, AMS/USDA, 202-690-1315/fax 690-1340, or Internet: Jim.Caron@USDA.gov, [Commodity, carrier, and ocean rate data compiled by Heidi Reichert and Ron Hagen, OCEAN Rate Bulletin Team, USDA], August 1, 1999.